

U.S. Application No.: 09/555,139
Attorney Docket No.: 1975.0024-00

IN THE CLAIMS:

Please replace all prior versions of claims 10-26 with the version of claims 10-26 set forth below, and add new claims 27 and 28 as follows:

10. (Currently Amended) A vaccine composition comprising at least one particulate immunogen and an adjuvanting amount of B subunits of heat-labile enterotoxin characteristic of *E. coli*, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one particulate immunogen is not covalently coupled to said B subunits.
11. (Previously Added) The vaccine composition according to claim 10, wherein said B subunits are prepared by recombinant DNA methods.
12. (Previously Amended) The vaccine composition according to claim 10 or claim 11, wherein the at least one particulate immunogen comprises a viral antigen, a bacterial antigen, or a fungal antigen, or a combination thereof.
13. (Previously Amended) The vaccine composition according to claim 10, wherein the at least one particulate immunogen is derived from at least one infective agent which causes a disease which is transmitted by mucosal infection.

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14. (Previously Amended) The vaccine composition according to claim 10, wherein the at least one particulate immunogen is characteristic of a micro-organism which causes a disease which is transmitted by mucosal infection.

15. (Previously Amended) The vaccine composition according to claim 10 or claim 11, wherein the at least one particulate immunogen provides immunization against a disease which is transmitted by mucosal infection.

16. (Previously Amended) The vaccine composition according to claim 15, wherein the at least one particulate immunogen comprises at least one influenza antigen.

17. (Currently Amended) A method for the induction of a systemic immunoglobulin response against at least one immunogen in a human or animal host in need of such induction, comprising:

administering to mucosal tissue of the host said at least one immunogen in particulate form and an adjuvanting amount of B subunits of heat-labile enterotoxin characteristic of *E. coli*, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one immunogen together with said B subunits is present in sufficient quantity for said induction, and wherein said at least one immunogen is not covalently coupled to said B subunits.

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18. (Currently Amended) A method for the induction of a common mucosal immune response against at least one immunogen in a human or animal host in need of such induction, comprising:

administering to mucosal tissue of the host said at least one immunogen in particulate form and an adjuvanting amount of B subunits of heat-labile enterotoxin characteristic of *E. coli*, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one immunogen together with said B subunits is present in sufficient quantity for said induction, and wherein said at least one immunogen is not covalently coupled to said B subunits.

19. (Currently Amended) A method of preparing a vaccine for the induction of a systemic immunoglobulin response against at least one immunogen in a human or animal host upon mucosal administration of said vaccine, comprising:

combining said at least one immunogen in particulate form and an adjuvanting amount of B subunits of heat-labile enterotoxin characteristic of *E. coli*, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one immunogen together with said B subunits is present in sufficient quantity for said induction, and wherein said at least one immunogen is not covalently coupled to said B subunits.

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20. (Currently Amended) A method of preparing a vaccine for the induction of a common mucosal immune response against at least one immunogen in a human or animal host upon local mucosal administration of said vaccine, comprising:
combining said at least one immunogen in particulate form and an adjuvanting amount of B subunits of heat-labile enterotoxin characteristic of *E. coli*, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one immunogen together with said B subunits is present in sufficient quantity for said induction, and wherein said at least one immunogen is not covalently coupled to said B subunits.

21. (Currently Amended) A vaccine comprising at least one particulate immunogen and an adjuvanting amount of B subunits of enterotoxin, wherein said B subunits are free of A subunit and toxic LT holotoxin, and wherein said at least one particulate immunogen is not covalently coupled to said B subunits.

22. (Currently Amended) A vaccine comprising at least one particulate immunogen and an adjuvanting amount of B subunits of cholera toxin, wherein said B subunits are free of A subunit and toxic CT holotoxin, and wherein said at least one particulate immunogen is not covalently coupled to said B subunits.

23. (Currently Amended) A vaccine comprising at least one particulate immunogen and an adjuvanting amount of B subunits chosen from enterotoxin and

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cholera toxin, wherein said B subunits are free of A subunit, toxic LT holotoxin, and toxic CT holotoxin, and wherein said at least one particulate immunogen is not covalently coupled to said B subunits.

24. (Previously Added) The vaccine according to claim 21, wherein the at least one particulate immunogen comprises at least one influenza antigen.

25. (Previously Added) The vaccine according to claim 22, wherein the at least one particulate immunogen comprises at least one influenza antigen.

26. (Currently Amended) The vaccine according to claim 23, wherein the at least one particulate immunogen comprises at least one influenza antigen.

27. (New) The vaccine composition of claim 10, wherein the at least one particulate immunogen comprises micelles, rosettes, or a mixture of micelles and rosettes.

28. (New) The vaccine of any one of claim 21, claim 22, and claim 23, wherein the at least one particulate immunogen comprises micelles, rosettes, or a mixture of micelles and rosettes.